

REMARKS

Claims 3, 6 and 7 are pending. By this Amendment, claim 10 is canceled. Applicants appreciate the allowance of claim 3.

Entry of the amendments is proper under 37 C.F.R. §1.116 because the amendments:

(a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration; (c) do not present any additional claims; and (d) place the application in better form for appeal, should an appeal be necessary. Entry of the amendments is thus respectfully requested.

An Election of Species was required and Applicants elected Figs. 1-9F. Applicants affirm the election of Figs. 1-9F. Claims 3, 6 and 7 read on the elected species. Applicants reserve the right to file a divisional application based on claim 10.

Claim 6 was rejected under 35 U.S.C. §102(e) over Sumisha et al. (Sumisha), U.S. Patent No. 6,854,670. The rejection is respectfully traversed.

Sumisha does not qualify as a reference against this application. This application claims priority from Japanese Patent Application No. 2003-122104, filed April 25, 2003. Sumisha was filed on May 12, 2003. Applicants enclose a verified translation of Japanese Patent Application No. 2003-122104.

It is respectfully requested that the rejection be withdrawn.

Claim 7 was rejected under 35 U.S.C. §102(b) over Fuchs et al. (Fuchs), U.S. Patent No. 6,170,763. The rejection is respectfully traversed.

Fuchs fails to disclose a fuel injection valve with a vortex flow generator groove provided on a face on an upstream side of a metering plate so that the vortex flow generator groove can be connected to a wall face of an inlet of a nozzle hole, as recited in claim 7.

Fuchs discloses an orifice plate 23 with four inlet regions 40. Each inlet region 40 includes a tangential arm 44 projecting from a circular region 43 (col. 8, lines 40-45). Fuel

from an outlet 31 enters into the tangential arms 44, the circular regions 43 of the inlet regions 40 and then outlet orifices 39 located at the middle of the regions 43 (col. 8, lines 48-53).

Fuchs thus fails to disclose all of the features recited in claim 7 because the outlet orifices 39 (nozzle holes) are located in the middle of the circular regions 43. By providing the outlet orifices 39 in the middle of the circular regions 43, neither the tangential arms 44 nor the circular regions 43 are connected to a wall face of the inlet of the outlet orifices 39. The circular regions 43 are instead connected to an end of the outlet orifices 39.

Accordingly, Fuchs fails to disclose a vortex flow generator groove that is connected to a wall face of an inlet of a nozzle hole, as recited in claim 7. It is respectfully requested that the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 3, 6 and 7 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Scott M. Schulte
Registration No. 44,325

JAO:SMS/sxb

Attachment:

Verified Translation of JP2003-122104

Date: January 18, 2006

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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